1. (Original) A method of forming a glass material utilizing an apparatus that includes at least one vessel containing a refractory metal component having an inner wall which contacts the glass, said method comprising the steps of:

coating an outer wall of the refractory metal component with an oxygen ion transportable material;

coating at least a portion of the oxygen ion transportable material with a conductive electrode; and

applying a DC voltage to the refractory metal component and the conductive electrode.

2. (Original) The method of Claim 1, wherein when said DC voltage is applied to the refractory metal component and the conductive electrode then oxygen ions migrate from the refractory metal component to the conductive electrode which enables one to control the partial pressure of oxygen around an exterior of the at least one vessel which effectively reduces hydrogen permeation from molten glass that effectively suppresses the formation of undesirable gaseous inclusions within the glass material.

3. (Original) The method of Claim 2, wherein the ability to control the partial pressure of oxygen around an exterior of the at least one vessel also helps one to effectively reduce the oxidation of external, non-glass contact surfaces of the refractory metal component.

4. (Original) The method of Claim 1, further comprising the step of adjusting the DC voltage to control the rate of the oxygen migration from the refractory metal component to the conductive electrode which enables one to control a magnitude of the partial pressure of oxygen to be within a range of about 1 to 10^{-10} atmospheres around the exterior of the at least one vessel.

5. (Original) The method of Claim 1, wherein said at least one vessel includes a melting vessel, a fining vessel, a delivery vessel, a mixing vessel or a forming vessel.

6. (Original) The method of Claim 1, wherein said refractory metal component includes a metal selected from the group of platinum, molybdenum, palladium, rhodium and alloys thereof.

7. (Original) The method of Claim 1, wherein said oxygen ion transportable material includes partially or fully stabilized zirconia.

8. (Original) The method of Claim 1, wherein said glass material is a glass sheet used in a liquid crystal display.

9. (Withdrawn) A system used to form a glass material, said system comprising:

a vessel that includes a refractory metal component having an inner wall that contacts molten glass and an outer wall coated with an oxygen ion transportable material which is then coated with a conductive electrode; and

a DC power source having a negative power lead connected to the refractory metal component and a positive power lead connected to the conductive electrode.

10. (Withdrawn) The system of Claim 9, wherein when said DC power source supplies DC power across the oxygen ion transportable material then oxygen ions migrate from the refractory metal component to the conductive electrode and enables one to control the partial pressure of oxygen around an exterior of the vessel which helps one to effectively suppress the formation of undesirable gaseous inclusions and surface blisters within said glass material.

11. (Withdrawn) The system of Claim 10, wherein said DC power source in addition to enabling one to control the partial pressure of oxygen around the exterior of the vessel also helps one to effectively reduce the oxidation of external, non-glass contact surfaces of the refractory metal component.

12. (Withdrawn) The system of Claim 9, wherein said DC power source is capable of supplying adjustable DC power which enables one to control the rate of the oxygen migration from the refractory metal component to the conductive electrode which enables one to control a magnitude of the partial pressure of oxygen to be within a range of about 1 to 10^{-10} atmospheres around the exterior of the vessel.

13. (Withdrawn) The system of Claim 9, wherein said vessel includes a melting vessel, a fining vessel, a delivery vessel, a mixing vessel or a forming vessel.

14. (Withdrawn) The system of Claim 9, wherein said refractory metal component includes a metal selected from the group of platinum, molybdenum, palladium, rhodium and alloys thereof.

15. (Withdrawn) The system of Claim 9, wherein said oxygen ion transportable material includes partially or fully stabilized zirconia.

16. (Withdrawn) The system of Claim 9, wherein said glass material is a glass sheet used in a liquid crystal display.

17. (Withdrawn) A glass material formed by a manufacturing process performed within a system that includes:

a melting, fining, delivery, mixing or forming vessel, the vessel includes a refractory metal component having an inner wall that contacts the glass and an outer wall coated with an oxygen ion transportable material which is then coated with a conductive electrode; and

a DC power source having a negative power lead connected to the refractory metal component and a positive power lead connected to the conductive electrode.

18. (Withdrawn) The glass material of Claim 17, wherein when said DC power source supplies DC power across the oxygen ion transportable material then oxygen ions migrate from the refractory metal component to the conductive electrode and enables one to control the partial pressure of oxygen around an exterior of the vessel which helps one to effectively suppress the formation of undesirable gaseous inclusions and surface blisters within said glass material.

19. (Withdrawn) The glass material of Claim 18, wherein said DC power source in addition to enabling one to control the partial pressure of oxygen around the exterior of the vessel also helps one to effectively reduce the oxidation of external, non-glass contact surfaces of the refractory metal component.

20. (Withdrawn) The glass material of Claim 17, wherein said DC power source is capable of supplying adjustable DC power which enables one to control the rate of the oxygen migration from the refractory metal component to the conductive electrode which enables one to control a magnitude of the partial pressure of oxygen to be within a range of about 1 to 10^{-10} atmospheres around the exterior of the vessel.

21. (Withdrawn) The glass material of Claim 17, wherein said refractory metal component includes a metal selected from the group of platinum, molybdenum, palladium, rhodium and alloys thereof.

22. (Withdrawn) The glass material of Claim 17, wherein said oxygen ion transportable material includes partially or fully stabilized zirconia.

23. (Withdrawn) The glass material of Claim 17, wherein said manufacturing process is a fusion manufacturing process.

24. (Withdrawn) The glass material of Claim 17, wherein said glass material is a glass sheet.

25. (Withdrawn) The glass material of Claim 17, wherein said glass material is a glass tube.